AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Currently Amended): An information retrieval system <u>implemented on one or more data processors</u> in which information items map to respective nodes in an array of nodes by mutual similarity of said information items, so that similar information items map to nodes at similar positions in said array of nodes to form a self-organizing map, said system comprising:

(i) a graphical user interface configured to display a representation of nodes of the self-organizing map as a two-dimensional display array of display points within a display area on a user display;

(ii) a user control configured to define a two-dimensional region of said display area;

(iii) a detector configured to detect those display points lying within said two-dimensional region of said display area; and

(iv) a comparator configured to compute a quantization error of a newly received information item and comparing the quantization error to the self-organizing map, and configured to retrain the self-organizing map when the quantization error is above a predetermined threshold, wherein

said graphical user interface is further configured to concurrently display a list of data representing information items, being those information items mapped onto said nodes corresponding to display points displayed within said two-dimensional region of said display area.

Claim 2 (Original): A system according to claim 1, in which said information items are mapped to nodes in said array on the basis of a feature vector derived from each information item.

Claim 3 (Original): A system according to claim 2, in which said feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of information features.

Claim 4 (Original): A system according to claim 3, in which said information items comprise textual information, said feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of words.

Claim 5 (Original): A system according to claim 1, in which said information items comprise textual information, said nodes being mapped by mutual similarity of at least a part of said textual information.

Claim 6 (Original): A system according to claim 4, in which said information items are preprocessed for mapping by excluding words occurring with more than a threshold frequency amongst said set of information items.

Claim 7 (Original): A system according to claim 4, in which said information items are preprocessed for mapping by excluding words occurring with less than a threshold frequency amongst said set of information items.

Claim 8 (Previously Presented): A system according to claim 4, comprising:

(i) search logic configured to carry out a word-related search of said information items, wherein

said search logic and said graphical user interface is arranged to co-operate so that only those display points corresponding to information items selected by said search are displayed.

Claim 9 (Previously Presented): A system according to claim 1, in which said mapping between information items and nodes in said array includes a dither component configured to display nodes that have substantially identical or identical information items at different locations in a display area to visibly distinguish the nodes having substantially identical or identical information items, the dither component being a random addition to a node position of up to a half of a separation between adjacent nodes.

Claim 10 (Previously Presented): A system according to claim 1, further comprising:
a user control configured to choose one or more information items from said list,
wherein said graphical user interface is further configured to alter said manner of display within said display area of display points corresponding to selected information items.

Claim 11 (Original): A system according to claim 10, in which said graphical user interface is operable to display in a different colour and/or intensity those display points corresponding to information items chosen within said list.

Claim 12 (Currently Amended): An information storage system in which information items are processed so as to map to respective nodes in an array of nodes by mutual similarity

of the information items, such that similar information items map to nodes at similar

positions in the array of nodes to form a self-organizing map, the system comprising:

a generator configured to generate a feature vector derived from each information

item of the self-organizing map, the feature vector for an information item representing a set

of frequencies of occurrence, within that information item, of each of a group of information

features; and

mapping logic configured to map each feature vector to a node in the self-organizing

map, the mapping between information items and nodes in the array including a dither

component configured to display nodes that have substantially identical or identical

information items at different locations arising from an application of the dither component in

a display area to visibly distinguish the nodes having substantially identical or identical

information items,

wherein the dither component is a random addition to a node position of up to a half

of a separation distance between adjacent nodes.

Claim 13 (Previously Presented): A system according to claim 12, comprising:

logic configured to map a newly received information item to a node in the array of

nodes;

a mapping error detector configured to detect a mapping error as the newly received

information item is so mapped; and

logic, responsive to a detection that the mapping error exceeds a threshold error

amount, configured to initiate a remapping process of the set of information items and the

newly received information item.

Claim 14 (Original): A portable data processing device comprising a system according to claim 1.

Claim 15 (Original): Video acquisition and/or processing apparatus comprising a system according to claim 1.

Claim 16 (Currently Amended): An information storage method in which information items are processed so as to map to respective nodes in an array of nodes by mutual similarity of the information items, such that similar information items map to nodes at similar positions in the array of nodes to form an self-organizing map, the method comprising:

generating a feature vector derived from each information item of the self-organizing map, the feature vector for an information item representing a set of frequencies of occurrence, within that information item, of each of a group of information features; and

mapping each feature vector to a node in the self-organizing map, the mapping between information items and nodes in the array including a dither component configured to display nodes that have substantially identical or identical information items at different locations arising from an application of the dither component in a display area to visibly distinguish the nodes having substantially identical or identical information items,

wherein the dither component is a random addition to a node position of up to a half of a separation distance between adjacent nodes.

Claim 17 (Previously Presented): An information retrieval method in which a set of distinct information items map to respective nodes in an array of nodes by mutual similarity

of said information items, so that similar information items map to nodes at similar positions

in said array of nodes to form a self-organizing map, the method comprising:

(i) displaying a representation of at least some of said nodes as a two-dimensional

display array of display points within a display area on a user display;

(ii) defining, with a user control, a two-dimensional region of said display area;

(iii) detecting those display points lying within said two-dimensional region of said

display area;

(iv) displaying, concurrently with the representation of at least some of said nodes, a

list of data representing information items, being those information items mapped onto nodes

corresponding to display points displayed within said two-dimensional region of said display

area; and

(v) computing a quantization error of a newly received information item, comparing

the quantization error to the self-organizing map, and retraining the self-organizing map

when the quantization error is above a predetermined threshold.

Claim 18 (Cancelled).

Claim 19 (Previously Presented): A computer readable medium having program code

recorded thereon, the program code configured to carry out a method according to Claim 16

when executed on a computer.

Claims 20-22 (Cancelled).

Claim 23 (Previously Presented): A computer readable medium having program code recorded thereon, the program code configured to carry out a method according to Claim 17 when executed on a computer.